IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A double-deck elevator capable of adjusting the spacing in the vertical direction between upper and lower cages provided on a cage frame in a vertically movable manner, comprising:

a screw shaft rotatably supported by said cage frame and extending in the vertical direction;

screw shaft driving unit for rotating said screw shaft in the forward and reverse directions;

controllers for controlling the operation of said screw shaft driving units;[[p]]

an upper supporting member which is engaged with an upper screw part of said screw shaft and vertically moved by the rotation of said screw shaft, and which hoists and supports said upper cage via one upper hoist-and-support part disposed on an upper part of said upper cage;

a lower supporting member which is engaged with a lower screw part threaded in a direction opposite to that of said upper screw part of said screw shaft and vertically moved by the rotation of said screw shaft, and which hoists and supports said lower cage via one lower hoist-and-support part disposed on an upper part of said lower cage;

an upper measuring unit which measures a load on said upper supporting member from said upper hoist-and-support part; and

a lower measuring unit which measures a load on said lower supporting member from said lower hoist-and-support part,

wherein said controllers control the operation of said screw shaft driving units based on the load value obtained by said upper measuring unit and the load value obtained from said lower measuring unit before adjusting the spacing in the vertical direction between said

upper cage and said lower cage so that said screw shaft driving units output a drive torque with a direction and magnitude for canceling the rotational biasing force applied to said screw shaft attributable to the difference in weight between said upper cage and said lower cage.

Claim 2 (Original): A double-deck elevator capable of adjusting the spacing in the vertical direction between an upper cage and a lower cage which are provided on said cage frame in a vertically movable manner, comprising:

right and left screw shafts rotatably supported on right and left sides of said cage frame and extending in the vertical direction, respectively;

right and left screw shaft driving units for rotating said right and left screw shafts in the forward and reverse directions, respectively;

controllers for individually controlling the operation of said right and left screw shaft driving units;

an upper supporting member, which extends in the right-and-left direction above said upper cage, and is engaged with upper screw parts of said right and left screw shafts and vertically moved by said screw shafts;

a lower supporting member, which extends in the right-and-left direction above said lower cage, and is engaged with lower screw parts which are threaded in a direction opposite to that of said upper screw parts of said right and left screw shafts and vertically moved by said screw shafts;

right and left upper hoist-and-support parts which are disposed on the right and left sides of an upper part of said upper cage in the vicinity of said right and left screw shafts, and engaged with said upper supporting member respectively to hoist and support said upper cage;

right and left lower hoist-and-support parts which are disposed on the right and left sides of an upper part of said lower cage in the vicinity of said right and left screw shafts, and engaged with said lower supporting member respectively to hoist and support said lower cage;

right and left upper measuring units for measuring a load applied to said upper supporting member from said right and left upper hoist-and-support parts; and

right and left lower measuring units for measuring a load applied to said lower supporting member from said right and left lower hoist-and-support parts,

wherein said controllers control the operation of said left screw shaft driving unit based on the load value obtained from said left upper measuring unit and the load value obtained from said left lower measuring unit before adjusting the spacing in the vertical direction between said upper cage and said lower cage so that a drive torque with a direction and magnitude for canceling the rotational biasing force applied to said left screw shaft attributable to the difference between the load applied to said upper supporting member from said upper hoist-and-support part and the load applied to said lower supporting member from said left lower hoist-and-support part is output, and

wherein said controllers control the operation of said right screw shaft driving unit based on the load value obtained from said right upper measuring unit and the load value obtained from said right lower measuring unit before adjusting the spacing in the vertical direction between said upper cage and said lower cage so that a drive torque with a direction and magnitude for canceling the rotational biasing force applied to said right screw shaft attributable to the difference between the load applied to said upper supporting member from said upper hoist-and-support part and the load applied to said lower supporting member from said right lower hoist-and-support part is output.

Claim 3 (Previously Amended): A double-deck elevator according to Claim 1,

wherein said upper measuring unit and said lower measuring unit comprise elastic bodies interposed between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part, and sensors for measuring the deformation in the vertical direction of said elastic bodies, and

wherein said controllers respectively calculate said load value based on the elastic constant of said elastic bodies and the deformation obtained from said sensors.

Claim 4 (Original): A double-deck elevator according to Claim 3,

wherein said controllers adjust the spacing in the vertical direction between said upper cage and said lower cage based on the deformation in the vertical direction of said elastic bodies obtained from said sensors.

Claim 5 (Previously Amended): A double-deck elevator according to Claim 1,

wherein said upper measuring unit and said lower measuring unit are load cells interposed between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part.

Claim 6 (Original): A double-deck elevator according to Claim 5,

wherein said load cells are disposed in series with elastic bodies between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part.

Claim 7 (Previously Presented): A double-deck elevator according to Claim 2,

wherein said upper measuring unit and said lower measuring unit comprise elastic bodies interposed between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part, and sensors for measuring the deformation in the vertical direction of said elastic bodies, and

wherein said controllers respectively calculate said load value based on the elastic constant of said elastic bodies and the deformation obtained from said sensors.

Claim 8 (Previously Presented): A double-deck elevator according to Claim 7,

wherein said controllers adjust the spacing in the vertical direction between said upper cage and said lower cage based on the deformation in the vertical direction of said elastic bodies obtained from said sensors.

Claim 9 (Previously Presented): A double-deck elevator according to Claim 2,

wherein said upper measuring unit and said lower measuring unit are load cells interposed between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part.

Claim 10 (Previously Presented): A double-deck elevator according to Claim 9,

wherein said load cells are disposed in series with elastic bodies between said upper supporting member and said upper hoist-and-support part, and between said lower supporting member and said lower hoist-and-support part.